

REMARKS

Claims 1, 5, and 13 are amended in response to the rejections under 35 U.S.C. § 112, first and second paragraphs. With regard to the rejections under 35 U.S.C. § 112, first paragraph, the specification on page 5, line 15, page 11, line 15 to page 14, line 11, and in Figure 7 clearly refers to allelic variants of the cloned receptor from other insects (part (b) of claim 1, for example). Although the allelic variants and fragments bind the CryIA(b) toxin, the receptors may also bind other toxins. The claims have also been amended to specify that fragments of the receptor or homologues thereof have about the same size as the polypeptide encoded by the Bam-Sac fragment, which is characterized on page 34, line 15 to page 37, line 7 in the specification. Thus, the claims have been amended such that they comport with the requirements of 35 U.S.C. § 112, first paragraph.

With regard to the rejections under 35 U.S.C. § 112, second paragraph, the claims have been amended to specify stringent conditions, for which the specification provides basis on page 13, lines 4-13. Also the claims are amended to specify that the receptors are expressed by cells, and the amendments overcome any ambiguity with regard to the term "nucleic acid." Thus, it is respectfully asserted that the amended claims comport with the requirements under 35 U.S.C. § 112, second paragraph.

Matters of Form

Claims 4, 8, and 15 have been amended to include the term "said" before the term "eukaryotic cell" in response to the claim objections. In addition, the specification has been amended to remove the underlining from the sequence identifier on page 5, line 20.

Objection to Figure 2I

It would be appreciated if the Office would clarify the objection to the drawing. The Office states that a sequence identifier must appear in a drawing or the Brief Description of the Drawings section of the specification when a drawing includes a sequence, and that a sequence identifier should be present in Figure 2I. It is respectfully submitted that Figure 2I already includes the requisite sequence identifiers, SEQ ID NO: 8-11, for new sequences presented therein. The remainder of the sequences set forth in Figure 2I that are not designated by a

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sequence identifier are subsequences of SEQ ID NO: 2 (BTRcad 1 to 11). MPEP 2423.03 (last paragraph) states that a subsequence of a longer sequence already set forth in the Sequence Listing (SEQ ID NO: 2 here) does not need to be included separately in the Sequence Listing. Furthermore, the amended Brief Description of the Drawings (amended July 31, 2001) makes it clear that susbquences in Figure 2I are present in SEQ ID NO: 2, and therefore, it is respectfully submitted that there is no need to separately identify these subsequences in the drawing.

Double Patenting Rejection

Claims 13-15 were rejected under the judicially created doctrine of obviousness-type double patenting over claims 5-10 of U.S. Patent No. 5,693,491. This rejection is obviated by the terminal disclaimer filed herewith.

Conclusions

The obviousness-type double patenting rejection is obviated by a terminal disclaimer filed herewith and the matters of form have been obviated by amendments to the specification and claims. Furthermore, the rejections under 35 U.S.C. § 112, first and second paragraphs, are obviated by the claim amendments. Thus, it is respectfully asserted that the rejections have been overcome and a notice of allowance is respectfully requested.

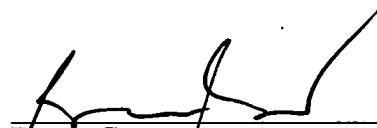
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In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Docket No. 271122003713. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

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